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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,660	09/10/2003	John Peter Roquemore III	11176.00	3683
26884	7590	09/08/2005	EXAMINER	
PAUL W. MARTIN LAW DEPARTMENT, WHQ-4 1700 S. PATTERSON BLVD. DAYTON, OH 45479-0001				AU, SCOTT D
		ART UNIT		PAPER NUMBER
		2635		

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/659,660	ROQUEMORE, JOHN PETER
	Examiner	Art Unit
	Scott Au	2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 September 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/2/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## DETAILED ACTION

The application of Roquemore for a "Radio frequency identification system with separately located transmitters and receivers" filed September 10, 2003 has been examined.

Claims 1-14 are pending.

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claims 4-8 and 12-14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of

the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,7,9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodwin, III (US# 6,601,764) in view of Zimmerman et al. (US# 6,046,682).

Referring to claims 1 and 9, Goodwin, III discloses a radio frequency identification system comprising:  
it inherent that a plurality of transmitters of the interrogators for interrogating radio frequency identification tags attached to items on the store shelves (col. 1 lines 5-15);  
a plurality of electronic labels (32) (i.e. ESLs) including receivers (i.e. part of the interrogator 50) for receiving response information from the radio frequency identification tags; and a computer (30) (i.e. computer and to the server 12) for controlling the transmitters and receivers (col. 2 lines 25-67, col. 3 lines 1-35 and col. 4 lines 1-18).

However, Goodwin, III did not explicitly disclose wherein the receivers are separately located from the transmitters.

In the same field of endeavor of tracking system, Zimmerman et al. discloses the receivers are separately located from the transmitters (col. 3 lines 13-18; see Figure 5).

One ordinary skill in the art understands that the receivers are separately located from the transmitters of Zimmerman et al. is desirable in the tracking system of Goodwin, III because Goodwin, III suggests the system includes an electronic shelf label (ESL) system including an ESL, a radio frequency identification (RFID) label interrogator associated with the ESL, first and second groups of RFID labels attached to first and second groups of items associated with the ESL, and a computer (col. 1 lines 40-45) and Zimmerman et al. suggest CBS 16 preferably includes one transmit antenna 37 and from one to four receive antennas 38 for transmitting and receiving messages between CBS 16 and EPLs 18. CBS 16 includes CBS circuitry 39 which controls operation of CBS 16. The transmit antennas and receivers antennas are separately located (col. 3 lines 13-18). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include the receivers are separately located from the transmitters of Zimmerman et al. in the tracking system of Goodwin, III with the motivation for doing so would strength the measurement of ESLs (col. 2 lines 24-27, see Zimmerman et al.).

Referring to claim 2, Goodwin, III in view of Zimmerman et al. disclose the system of claim 1, Zimmerman et al. disclose the CBS 16 with plurality of transmitter

antennas 37 is less than receiver antennas 38 for transmitting and receiving messages from the EPLs 18 (col. 3 lines 13-19).

Referring to claim 3, Goodwin, III in view of Zimmerman et al. disclose the system of claim 1, Zimmerman et al. disclose the wherein the transmitters number as low as about half of the receivers (col. 3 lines 14-17).

Referring to claim 4, Goodwin, III in view of Zimmerman et al. disclose the system of claim 1, Zimmerman et al. disclose wherein the receivers are closer to the items than the transmitters (i.e. Figure 5, receiver antennas 38 are closer to the EPLs).

Referring to claim 7, Goodwin, III in view of Zimmerman et al. disclose the system of claim 1, Zimmerman et al. disclose wherein the receivers (38) (i.e. receiver antennas) are part of electronic shelf labels mounted on the shelves (i.e. see Figure 5).

Referring to claim 10, Goodwin, III in view of Zimmerman et al. disclose the system of claim 1, Goodwin, III discloses wherein the computer comprises an electronic shelf label system computer (30) (col. 2 lines 45-59; see Figure 1).

Referring to claim 11, Goodwin, III in view of Zimmerman et al. disclose the system of claim 1, Goodwin, III discloses wherein the electronic shelf labels store the

response information and download the response information upon receipt of a command from the computer (col. 4 lines 9-18).

Referring to claim 12, Goodwin, III in view of Zimmerman et al. disclose radio frequency identification method, claim 12 equivalent to that the combine of claims 1, and 9 addressed above, incorporated herein. Therefore, claim 12 is rejected for the same reasons given with respect to claims 1 and 9 combined.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodwin, III (US# 6,601,764) in view of Zimmerman et al. (US# 6,046,682) as applied to claim 1 above, and further in view of Dalton et al. (US# 6,419,154).

Referring to claims 5-6, Goodwin, III in view of Zimmerman et al. disclose the system of claim 1. However, Goodwin, III in view of Zimmerman et al. did not explicitly disclose wherein the transmitters are mounted in rows between the shelves and the receivers are mounted to a ceiling in rows above the shelves.

In the same field of endeavor of inventory system, Dalton et al. disclose wherein the transmitters and receivers (i.e. transmitters and receivers are within relay units 120) are mounted to a ceiling between store shelves (col. 2 lines 61-64).

One ordinary skill in the art understands that RFID tracking system, wherein the transmitters and receivers (i.e. transmitters and receivers are within relay units 120) are mounted to a ceiling between store shelves Dalton et al. is desirable in the

inventory system of Goodwin, III in view of Zimmerman et al. because Goodwin, III suggests the tracking of items on the shelves (col. 1 lines 10-19) and Dalton et al. suggest the tracking of the price of the items on the shelves (col. 1 lines 15-28). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include the transmitters and receivers within relay units 120 mounted in the ceiling of Dalton et al. in the inventory system of Goodwin, III in view of Zimmerman et al. with the motivation for doing so would allow the high precision of communication between the labels and the interrogator.

Claims 8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodwin, III (US# 6,601,764) in view of Zimmerman et al. (US# 6,046,682) and Dalton et al. (US# 6,419,154).

Referring to claim 8, Goodwin, III in view of Zimmerman et al. and Dalton et al. disclose radio frequency identification system, claim 8 equivalent to that the combine of claims 1,3, and 5-6 addressed above, incorporated herein. Therefore, claim 8 is rejected for the same reasons given with respect to claims 1,3 and 5-6 combined.

Referring to claims 13-14, Goodwin, III in view of Zimmerman et al. and Dalton et al. disclose radio frequency identification method, claim 13-14 equivalent to that the combine of claims 1 and 9,3, and 5-6 addressed above, incorporated herein. Therefore,

claims 13-14 is rejected for the same reasons given with respect to claims 1 and 9, 3 and 5-6 combined and to the extent that the electronic shelf labels adjacent to the items.

It is obvious, Goodwin, III discloses the electronic shelf labels adjacent to the items in order to communicate with the items.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stevens, III (US# 6,747,560) disclose the system and method of detecting movement of an item.

Haulk et al. (US# 6,626,359) disclose the method and apparatus for reduced electronic shelf label power consumption.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Au whose telephone number is (571) 272-3063. The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached at (571) 272-3068. The fax phone numbers for the organization where this application or proceeding is assigned are (571)-272-1817.

Art Unit: 2635

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Scott Au

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

